Talbot County Nuisance Flood Plan

January 2025

Executive Summary

This plan has been adopted as the Talbot County Nuisance Flood Plan. It addresses the framework for nuisance flooding which dictates increased preparedness, response, recovery, and mitigation efforts due to coastal and low-lying communities facing increasing disturbances from flooding events. This plan outlines a strategic approach for identifying, documenting, and mitigating the impacts of nuisance flooding while safeguarding public safety, property, and the county's natural resources.

Each of the departments and agencies who are assigned responsibilities in this Plan has participated in the development, review, and revision process.

The Talbot County Nuisance Flood Plan represents a commitment to resilience and sustainability, safeguarding the community against the growing threat of nuisance flooding. By addressing immediate risks and planning for the future, Talbot County will protect its citizens, economy, and natural environment while fostering long-term sustainability.

Acknowledgments

The Talbot County Department of Emergency Services would like to acknowledge the following entities for their contributions to the Plan:

- Talbot County Department of Emergency Services
- Talbot County Department Public Works
- Talbot County Roads and Facilities Department
- Talbot County Department of Planning and Zoning

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MEMO

TO: Clay Stamp
FROM: Brian LeCates
DATE: February 19, 2025
RE: Nuisance Flood Plan

The Talbot County Department of Emergency Services worked in partnership with Planning and Zoning and Public Works in the creation of the Talbot County Nuisance Flood Plan (NFP). This plan addresses the framework for nuisance flooding which dictates increased preparedness, response, recovery, and mitigation efforts due to coastal and low-lying communities facing increasing disturbances from flooding events. This plan outlines a strategic approach for identifying, documenting, and mitigating the impacts of nuisance flooding while safeguarding public safety, property, and the county's natural resources. Ensuring proper documentation of flooding events in Talbot County will allow a more accurate and clear picture of the impacts that flooding has on public services, property, and our communities. Having full situational awareness in turn warrants proper response, targeted mitigation strategies, and proper preparedness for future events.

Each of the departments and agencies who are assigned responsibilities in this Plan has participated in the development, review, and revision process.

The NFP represents a commitment to resilience and sustainability, safeguarding the community against the growing threat of nuisance flooding. By addressing immediate risks and planning for the future, Talbot County will protect its citizens, economy, and natural environment while fostering long-term sustainability.

This plan will be posted on www.talbotdes.org, supplement the Hazard Mitigation and Community Resilience Plan, and will be updated at least every five years under Maryland House Bill 1427 (2019), §3-1018(b) and (c) and Senate Bill 1006 and House Bill 1503 (2018).

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I. Introduction

Pursuant to Maryland House Bill 1427 (2019), §3-1018(b) and (c), on or before October 1, 2020, a local jurisdiction that experiences nuisance flooding shall develop a plan to address nuisance flooding. In addition, a local jurisdiction shall update the plan every five years; publicize the plan on the local jurisdiction's website; and shall submit a copy of the plan to the Maryland Department of Planning (MDP). This legislation is an update to Senate Bill 1006 and House Bill 1503 (2018). Talbot County has created a Nuisance Flood Plan (NFP) that supplements the Talbot County Hazard Mitigation and Community Resilience Plan (HMP) and the Talbot County Emergency Operations Plan (EOP).

1.1 Purpose and Scope

Flooding is one of the most common natural hazards experienced in Talbot County. Depending on the circumstances, flooding may be widespread or isolated, developing slowly or quickly. It may take the form of coastal, overland, or flash flooding. Floods may originate from ice jams or from the failure of dams or levees. Nuisance flooding is a more specific and commonplace phenomenon that dictates a slighter response and threatens the community in less intrusive ways.

The National Oceanic and Atmospheric Administration (NOAA) defines nuisance flooding, or high tide flooding, as "flooding that leads to public inconveniences such as road closures. It is increasingly common as coastal sea levels rise." The language of SB 1006 refers to nuisance flooding as "high-tide flooding that causes public inconveniences." Nuisance flooding is typically unrelated to particular storm events, though it may exacerbated by long-duration wind events or passing storm systems. As such, it is frequently referred to as "sunny day flooding."

Nuisance flooding is capable of disrupting daily activities through a variety of mechanisms, such as the closure of roads due to high water, the inundation of yards and parks, and the impairment of engineered and natural drainage systems. Currently, these disruptions typically occur for a period of several hours and then abate. However, as a changing climate increases the seal level and pushes precipitation and wind events to greater severity, these repeated "nuisance" impacts become significant stressors on the infrastructure, emergency response, public health, and fabric of the community.

For the purposes of this plan, Talbot County defines nuisance flooding as recurrent disruptive flooding, typically during high tides, heavy rainfall events, or long-duration wind-events. This type of flooding can disrupt daily activities causing public inconvenience, such as blocking roadways, inundating yard and parks, overwhelming stormwater systems (both natural and engineered), and impacting critical infrastructure. Talbot County includes rainfall and wind-event flooding into this plan and data collection due to them having the same impacts as tidal flooding, happening just a frequently, and requiring the same preparation and response.

In Talbot County, nuisance flooding occurs most predominately in locations near or adjacent to major bodies of water. Along the Chesapeake Bay, Miles River, Tred Avon River, Choptank River, and Bay Hundred Area, nuisance flooding is common on residential and commercial properties. Municipalities such as St. Michaels and Oxford have made major investments in flood mitigation by pursuing grant-

funded flooding and stormwater studies, tide gate installation, and living shoreline development. Elsewhere in the County, nuisance flooding is experienced as the following but not limited to:

- culverts in low-lying areas not adequately conveying water
- roadways in low-lying areas covered by still or flowing water disrupting vehicle traffic and pedestrians
- yards and parks collecting water for extended periods
- compromised underground water and sewage systems
- corroded roadways and bridges that are frequently covered by water
- economic impacts to businesses that are forced to close due to inaccessibility from high waters

II. Preparing for Nuisance Flooding

Because nuisance flooding is a complex problem, strong partnerships between planning and zoning, public works, roads, emergency management, and geographic information systems (GIS) are necessary for Talbot County to properly prepare for the impacts of nuisance flooding. In particular, it is important that departments collaborate to inventory and map chronically inundated areas.

As part of the nuisance flood planning process for Talbot County, a team of staff created a thorough inventory of known flood hazard areas, which can be found in Appendix A to this document. Departments involved in the nuisance flood planning and inventory process can be found in Appendix D.

In addition to mapping, accurate flood forecasting and warnings are critical to the safety and preparedness of a community. Official weather forecast data is received from the National Weather Service (NWS) forecasting office at Mt. Holly, New Jersey. Critical tide information is received from the NOAA tide gauge stationed at Claiborne Landing, as well as additional gauges elsewhere throughout the Chesapeake Bay. These gauges allow Talbot County to be aware of and prepare for possible nuisance flood impacts.

The Talbot County Department of Emergency Services (DES) maintains a close relationship with NWS Mt. Holly, receiving notifications of special hazards and watches or warnings of severe weather before the community is impacted. The timeliness of these severe weather alerts is critical when the potential for public safety impacts exists. When significant flooding is expected; it is the responsibility of Talbot County DES to disseminate information to key stakeholders to prepare for nuisance flooding impacts and respond accordingly. In cases where nuisance flooding reaches such severity that life safety, critical infrastructure, and key resources are threatened, Talbot County DES may disseminate public safety information via Everbridge, the County's mass notification system, and through additional methods. This messaging could include details about the flood severity, duration, protective actions, or impacts such as road closures.

III. Responding to Nuisance Flooding

3.1 Emergency Response

Thresholds are maintained for Talbot County which direct a set of actions based on a particular inundation level or frequency of flooding. These thresholds are meant to supplement actions directed by the Talbot County Emergency Operations Plan.

Threshold	Response Level	Required Action
Forecast data from the NWS or NOAA tide gauges indicates likely nuisance flooding impacts	Level I – Monitor and Notification *EOC Activation Level - Normal*	Talbot County DES • monitors forecast data and begins to assess risk of frequently impacted areas throughout the county. • notifies key stakeholders of potential impacts and to assess staffing levels and the need to prepositions high water signs and equipment (EOC partners, in specific public safety and transportation partners)
Flood waters are present below nuisance flood levels and are rising	Level II – Public Notification and Preparation *EOC Activation Level – Normal/Enhanced*	Talbot County DES • makes the public aware of nuisance flooding threat by sharing NWS messaging through mass notification systems, email, and social media. Roads and SHA • deploy personnel to monitor flood levels, place high water signs at impacted locations, and staff any needed equipment.
Flood waters are high enough to warrant temporary road closures	Level III – Flood Response *EOC Activation Level – Enhanced/Partial*	Talbot County DES • continue to monitor flood levels and notify the stakeholders and the public of flooding

		hazards via mass notification and social media. Secure any additional resources needed to maintain critical infrastructure and resources. Activate the EOC if additional resource, response, and information coordination is needed Roads and SHA • place personnel on standby; close roads and reroute traffic as flooding reaches hazardous levels Fire and Law Enforcement • monitor potentially impacted areas, provide notification and support as needed

When flooding reaches such severity that life safety, critical infrastructure, and key resources are threatened, "nuisance" flooding levels have been exceeded and additional action is required. Below are response concepts consistent with the Talbot County Emergency Operations Plan which may become necessary as flood waters rise beyond nuisance levels.

Response	**Recovery**
○ Lifesaving activities ○ Incident containment ○ Public health concerns ○ Maintain of transportation routes ○ Maintenance of critical facilities ○ Public warning mechanisms ○ Responder health and safety ○ Media and VIP management ○ Control and coordination of operations ○ Provision of transport, shelter and documentation of displaced persons ○ Restoration of normality	○ Handover from life saving ○ Facilitate the restoration of systems to normality ○ Assess damage and return vital life support systems to minimum operating standards ○ Collate financial cost of the event ○ Legal implication, claim investigation ○ Debrief and compilation of final report ○ Community and restoration services

3.2 Documentation

Documenting the extent and impacts of nuisance flooding is critical to public safety, maintaining infrastructure, and the long-term resilience of Talbot County. This information will be documented and updated on a regular basis for emergency planning purposes. A review of flood documentation should provide Talbot County with a comprehensive view of trends in flooding over time. Talbot County DES will work with the following departments to collect nuisance flooding documentation: Planning and Zoning, Public Works, 911 Division, Emergency Management Division, Roads and Facilities, and Talbot County Sheriff's Office. This documentation could consist of work/project codes, data from 911 calls or calls for service (coded in CAD), public calls/complaints, insurance claims, repetitive loss data, and more. The following information will be tracked and archived monthly by Talbot County DES by way of an email from the Emergency Management Division soliciting any flooding documentation from the previous month.

- Date, time, and location of nuisance flooding
- Impacts (e.g. "x amount of water on the roadway," "ditch overflow," "docks underwater," etc.)
- Agency notified and action taken – if applicable
- Weather conditions, time, and date

Additionally, The Maryland Department of Natural Resources maintains the MyCoast app, which is a mobile application that allows for public reporting of flooding within Talbot County. This data is shared with Talbot County DES and includes photos, locations, times/dates, and the correlated weather conditions at the time of the flooding report. This information is archived and monitored by Talbot County DES to supplement the data we collect internally.

Reference Appendix E for a copy of the Talbot County Nuisance Flood documentation tool for a sample of the types of information that are collected from Talbot County Departments monthly.

IV. Mitigating Nuisance Flooding Impacts

Both the Emergency Operations Plan (EOP) and the Community Resilience and Hazard Mitigation Plan (HMP) for Talbot County address measures by which the impacts of flooding can be mitigated, or lessened, by structural and nonstructural means. The purpose of the Nuisance Flood Plan is to augment and support the information and recommended actions found in other planning documents. According to *2022 Talbot County Hazard Mitigation and Community Resilience Plan Update:*

> *Mitigating future risks will enable Talbot County and its communities to withstand extreme events more effectively. The 2022 Talbot County Hazard Mitigation and Community Resilience Plan identifies various hazard types, the associated risks, and ways to address vulnerability. Hazard mitigation actions identified in the Plan that build resilience include infrastructure and environmental projects, integration of mitigation planning into existing or new County plans and regulations, and targeted public education and outreach efforts to inform residents and visitors of Talbot County's hazard risks and strategies to lessen impacts.*

The principles of floodplain management are fundamental to the proper mitigation of nuisance flooding in Talbot County. Higher standards – such as freeboard, development restrictions in the floodplain, etc. – can be effective in mitigating the effects of both nuisance flooding and other major flooding events.

Talbot County's HMP identifies four areas in which focus is directed regarding mitigation activity. These four areas include:

- Ensure that existing structures are resistant to flood-related damage,
- Create awareness of floodplain hazards and protective measures,
- Protect critical facilities, and
- Prepare/update stormwater management plans and best practices for various areas in the county.

In addition to actions specified in the HMP, the NFP includes activities that Talbot County will consider implementing to mitigate the impacts of nuisance flooding. These activities support the four areas of focus found in the HMP, goals of the Talbot County EOP, and Talbot County National Flood Insurance Program (NFIP) Flood Hazard information provided by FEMA:

- Structural
    - Enact floodplain ordinances or codes that mandate the use of freeboard beyond current requirements.
    - Improve stormwater management infrastructure to more effectively convey water from flood-prone areas.
    - Conduct regular maintenance of drainage and stormwater control systems.
    - Consider green infrastructure options rather than conventional stormwater solutions.
- Nonstructural
    - Public Information

        - Communicate the risk of nuisance flooding in non-emergency times to residents and businesses via mass mailings, social media, press releases, and automated phone calls.
        - Disseminate flood preparedness information to enable a safer and more aware public in the face of flooding.
        - Integrate nuisance flooding-related public messaging in Talbot County's existing public information plans and materials.
    - Planning
        - Ensure Talbot County's NFP is kept up to date and referenced in the HMP and other pertinent locations.
        - Schedule meetings of the nuisance flood planning committee on an as-needed basis to address flood-related issues to review plans. Reference Appendix D Flood Planning Committee Members
        - Improve stormwater management planning and strengthen policies to reduce runoff.
    - Implementation
        - Educate and train County staff on responsibilities under the NFP.
        - Preserve floodplains as open spaces through the use of legal protection status.
        - Protect and restore natural coastal features (forests, marshes, dunes, underwater grasses, and oysters) that can reduce the impacts of flooding.

V. Projections for Future Impacts

The areas impacted by nuisance flooding will increase gradually in the coming years as changing climates elevate water levels and drive precipitation patterns to new limits. New areas will also become impacted, leading to an increased number of businesses, residents, and critical infrastructure at risk. Public services will also be frequently impaired as flooding increases.

Talbot County will maintain a level of awareness of data made available by NOAA, the State of Maryland, the University of Maryland, and other scientific institutions as it pertains to the community and local flood risks. These risks of increased nuisance flooding will be communicated appropriately to residents and decision-makers by recommending they take appropriate action in areas of emergency response and hazard mitigation. Venues such as the Planning Commission meetings, Local Emergency Planning Committee meetings, and Emergency Services Advisory Board meetings can be used to communicate information on long-term flood risks. Future projections of sea level change and nuisance flooding, along with historical data on current flooding, should be integrated into land use planning, floodplain management, comprehensive planning, and capital investment planning.

VI. Plan Maintenance

Implementation and maintenance of this plan is critical to the success of this planning process, and also future opportunities for mitigation grant funding. Once approved, this plan will be updated every five years in compliance with Maryland House Bill 1427. Members of the Flood Planning Committee will meet at least annually to discuss the following; monthly flood documentation collected, HMP mitigation action items as they relate to flooding, potential funding sources for flood mitigation projects, additional concerns or issues related to flooding in Talbot County, potential cross-county department plan integration, and any updates or improvements they would like to propose to this plan. Any minor updates to this plan will be recorded under the Record of Plan Changes on page xxx. The Flood Planning Committee will use this plan and annual meeting to guide collaborative flood mitigation projects and the integration of community partnerships.

Appendix A Flooded Roadway Inventory (Modeled and Observed)

County Roads Impacted by Tidal Flood at 4 ft. (NAVD88)

*note that 0 ft. in NAVD88 is equal to 2.75 ft Mean Low Low Water. (add 2.75 ft of the below values to equal MLLW).

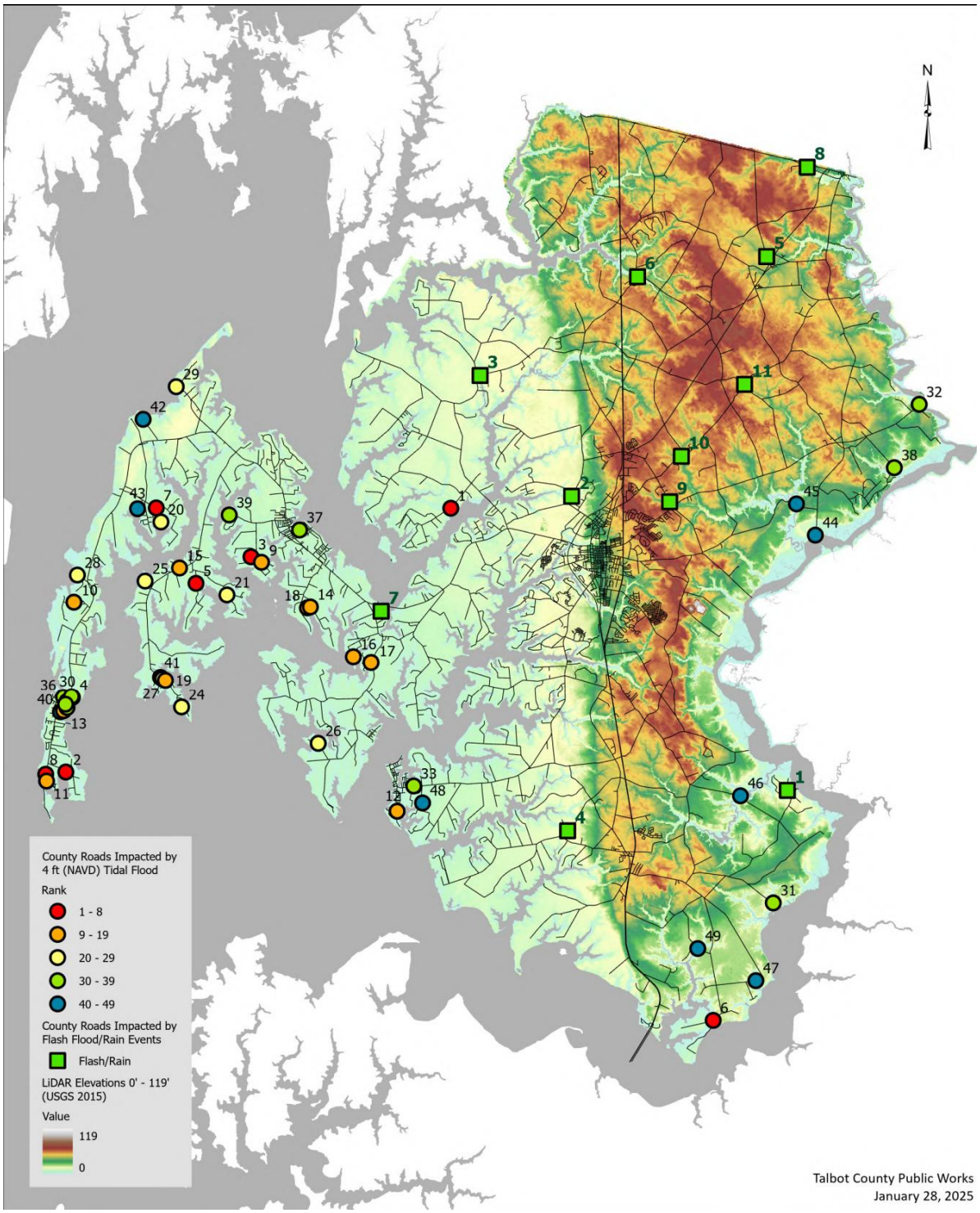
Road Name	Number of Properties Impacted	Estimated Depth of Flood Water Over the Road (ft)	Lowest Road Elevation (ft)	Linear Feet of Road Impacted
Miles River Road	83	1.5	2.46	420
Bar Neck Road	57	2.4	1.61	2,330
Church Neck Road	63	1.7	2.26	1,780
Camper Circle	51	1.8	2.17	1,600
Cooper Point Road	71	1.4	2.56	2,330
Chancellor Point Road	37	2.5	1.54	3,400
Pot Pie Road	68	1.0	2.99	620
Black Walnut Point Road	66	1.0	2.95	4,220
Oakwood Park Road	32	1.6	2.36	350
Punch Point Road	26	1.7	2.30	1,050
Fairbank Road	38	1.2	2.79	570
Bachelors Point Road	37	1.0	3.02	2,400
Gibsontown Road	26	1.3	2.66	320
Pea Neck Road	26	1.4	2.62	1,400
Twin Pines Road	15	1.3	2.69	375
Thorneton Road	9	1.9	2.13	1,300
Edgeview Road	16	1.0	3.02	400
Drum Point Road	19	0.9	3.08	1,320
Thamert Road	7	2.2	1.80	1,172
Sewell Point Road	11	1.7	2.30	322
Quaker Neck Road	20	0.7	3.31	380
Knapp Street	7	2.0	1.97	504
Chicken Point Road	33	0.4	3.61	725
Elston Shore Road	8	1.7	2.30	800
River Ridge Road	6	1.8	2.20	830
Anderby Hall Road	8	1.0	2.95	85
Duck Cove Lane	4	2.5	1.48	385
Lowes Wharf Road	2	2.8	1.21	1,160
Claiborne Landing Road	2	2.5	1.48	770
Summit Street	5	0.9	3.05	430

Road Name (cont.)	Number of Properties Impacted	Estimated Depth of Flood Water Over the Road (ft)	Lowest Road Elevation (ft)	Linear Feet of Road Impacted
Kates Point Road	1	2.8	1.18	575
Tuckahoe Landing Road	2	2.8	1.21	2,040
Hels Half Acre Road	5	0.8	3.25	220
Coopertown Road	6	0.7	3.35	200
Mission Road	6	0.9	3.15	190
Tongers Basin Road	4	1.2	2.79	110
Meadow Street	3	1.1	2.89	310
Turkey Creek Road	2	1.4	2.56	270
Mt Pleasant Landing Circle	2	0.9	3.08	315
Dogwood Harbor Road	3	1.2	2.79	2,340
Balls Creek Road	7	0.3	3.67	220
Wades Point Road	4	0.4	3.64	60
Howeth Road	1	1.0	2.99	380
Kingston Landing Road	1	0.8	3.25	480
Kingston Road	0	2.0	2.00	627
Bruceville Road	0	1.9	2.07	885
Jamaica Point Road	0	2.2	1.80	445
Boone Creek Road	0	1.3	2.72	620
Money Make Road	0	0.4	3.61	195

County Roads Impacted by Rainfall

Road Name	Watershed Area (Acres)
Chapel Road near Klondike	2,490
Old Queen Anne Road	1,800
Connolly Road	1,426
Three Bridge Branch	1,234
Goldsborough Neck Road	860
Black Dog Alley	856
Chapel Road near Councell	711
Little Park Road	397
Old Orchard Road	235
Sanderstown Road	81
Station Road	42

Appendix B Observed Nuisance Flood Map



Appendix C Flood Planning Committee

Name	Department	Title
Brian LeCates	Emergency Services	Director
Geneva Schaffle	Emergency Services	Emergency Management Division Chief
Madison Loker	Emergency Services	Emergency Management Coordinator
Katie Stafford	Emergency Services	GIS Specialist
Ray Clarke	Public Works	Director, County Engineer
Mike Mertaugh	Public Works	Assistant County Engineer
Josh Elliot	Public Works	Assistant County Engineer
Mark Cohoon	Public Works	GIS Manager
Brian Moore	Roads and Facilities	Director
Brennan Tarleton	Planning and Zoning	Director, Planning Officer
Bryce Yelton	Planning and Zoning	Assistant Planning Officer

Appendix D Nuisance Flood Documentation Tool

Date	Time	Report Name/ Agency	Reporter Phone Number (if applicable)	Street Name/ Cross Street	Impacts	Agency Notified	Action Taken/ Notes	Weather Conditions